

(Unless otherwise noted, all details in this inspection report were obtained from conversations with Dave Stiner, Brad McDowell, and Sherry Byers-Eddy or from observations during the inspection.)

I. Facility Information

Facility Name: Washington Beef, LLC

Facility Contact(s): Dave Stiner, Director of Facilities
Sherry Byers-Eddy, Wastewater Manager

Facility Type: Meat Packing Plants (SIC 2011)

Facility Address: Washington Beef, LLC
201 Elmwood Road
Toppenish, WA 98948

Mailing Address: Washington Beef, LLC
P.O. Box 832
Toppenish, WA 98948

Phone No.: (509) 865-2121

NPDES Permit No.: WA-005020-2

II. Inspection Information

Inspectors: Robert Grandinetti

Arrival Time: 10:21 AM

Departure Time: 12:41 PM

Purpose: Determination of compliance with the Clean Water Act

Inspection Date: September 2, 2009

III. Owner and Operator Information

Washington Beef LLC (Washington Beef), a wholly owned subsidiary of Agri Beef Co., owns, operates, and has maintenance responsibility for a complex slaughterhouse facility located on the Reservation of the Confederated Tribes and Bands of the Yakama Nation in Toppenish, Washington.

IV. Scope of Inspection

The purpose of the inspection was to review the facility's treatment process. The facility has been exceeding its permit effluent limits since late July. The inspection was

intended to identify the sequence of events that caused the lengthy period of noncompliance.

V. Inspection Entry

I reported to the guard shack upon arrival at the facility. I informed the guards that I was there to perform an NPDES inspection and that I could not sign the visitor sheet as it had a liability waiver. The guards directed me to the front administrative desk located behind a security gate. I drove through gate after the guards permitted my access. I parked and proceeded to the administrative desk where I was able to sign in without the liability waiver. I was met by Dave Stiner. I presented my credentials to Mr. Stiner and explained that I was there to inspect the cause of the recent upset of the wastewater treatment system and to review the wastewater treatment system.

VI. Background and Facility Description

The current NPDES Permit for Washington Beef authorizes the facility to discharge to the Wanity Slough. The NPDES Permit for Washington Beef is currently administratively extended.

At the time of the inspection the facility was processing and discharging waste through 002 to the Wanity Slough.

VII. Field Inspection/Observations

During the inspection I observed the discharge going to the Wanity Slough. The discharge was very turbid.

In June and July the facility cleaned out their tallow (fats) storage tanks as part of normal maintenance. The facility sent the solids accumulation from the bottom of the tanks to the anaerobic lagoons. On July 14 the facility was forced to send hot condensate to the wastewater treatment system (described below). The addition of the hot condensate with the tallow clean out is believed to have caused the upset of the anaerobic lagoons.

Normal operation of the treatment system is as follows: rotary drum screen, dissolved air flotation, anaerobic lagoon, barrier basin, sequential batch reactor (SBR), and surge basin. From the surge basin, the effluent may be routed to a dissolved air flotation unit, then to an ultraviolet disinfection system, and finally to Outfall 002 which discharges to Wanity Slough (Outfall 002 has a diffuser to facilitate effluent mixing in Wanity Slough); alternatively, the effluent from the surge basin may be routed to a series of 3 artificial wetlands prior to land application.

The upset of the anaerobic lagoons created an upset in the SBRs. As a result, most of the flow was directed to the artificial wetlands and land applied. However, SBRs require consistent flows to ensure smooth operations. In order to get the SBRs back up

and running, the facility decided to run wastewater through the SBR system even though effluent limits might not be met for a period of time. The facility also took steps to decrease the volume of wastewater going through the treatment plant by eliminating all overtime and weekend work. The decrease in work time meant the facility was running at approximately 80% capacity.

Facility representatives explained that they were forced to route the hot condensate to the treatment system because of a leak in the condensate return line. The facility heats a large volume of water to be used in the slaughtering process. Under normal operating conditions, the facility will capture the excess heated water and re-use it by sending it through a condensate return line. However, during the summer, the boiler condensate return line developed a crack and major leak. The broken return line forced the facility to send all of the hot water to the treatment plant instead of re-using it.

Based on conversations with facility staff and flow data, discharge from Outfall 002 was stopped on July 23. This flow was redirected to the artificial wetlands and then land applied. On August 21, a decision was made to run wastewater through the treatment system again in an attempt to regenerate the biological growth in the SBR.

I asked facility representatives what operational procedures were developed in order to prevent a similar occurrence. The facility representatives said that they put in place a new Standard Operating Procedure (SOP) for tallow tank maintenance. However, facility representatives felt that there was nothing extra they could do to prevent the boiler water return line from leaking again other than the standard maintenance they currently perform.

VIII. Sample Collection and Analyses

Samples were collected during the inspection. One sample was taken approximately 3,000 feet upstream of Outfall 002 (measured using Google Earth Pro). The upstream sample was taken within Wanity Slough at the point where the Slough enters the facility property. A second sample was taken of the treated effluent that discharged through Outfall 002. A third sample was taken approximately 1,000 feet downstream of Outfall 002. It was difficult to find a suitable place in Wanity Slough to take the downstream sample because of the heavily vegetated bank. I was able to gain access to Wanity Slough about 3 feet upstream of where Spencer Lateral flow enters Wanity Slough. The downstream sample did not appear to be taken in a very well mixed location as water from Spencer Lateral was much less turbid than water in Wanity Slough. The downstream sample had more of the less turbid Spencer Lateral flow than the turbid Wanity Slough (see Photos). Sample results are described in Table 1 below.

Table 1. Sample results

Location of Sample	Time taken	Parameter	Results
Wanity Slough – Upstream	11:34 AM	Ammonia (as N)	<0.2 mg/l
	11:34 AM	Nitrites (NO ₃ -NO ₂ as N)	0.4
	11:35 AM	E. coli	648.8 org/100 ml
	11:36 AM	Fecal coliform	920 org/100 ml
Outfall 002	11:46 AM	Ammonia (as N)	83.3 mg/l
	11:46 AM	Nitrites (NO ₃ -NO ₂ as N)	25 mg/l
	11:47 AM	E. coli	>2,400 org/100 ml
	11:48 AM	Fecal coliform	>2,400 org/100 ml
Wanity Slough – Downstream	12:03 PM	Ammonia (as N)	0.7 mg/l
	12:03 PM	Nitrites (NO ₃ -NO ₂ as N)	1.0 mg/l
	12:04 PM	E. coli	113.7 org/100 ml
	12:05 PM	Fecal coliform	240 org/100 ml

IX. Closing Conference

The closing conference included Brad McDowell, President of Washington Beef, LLC, and Dave Stiner.

X. Area of Concern

The concern that was discussed during the closing conference was the exceedences of the effluent limits that have been ongoing since August and appear to be continuing despite the facility's attempts to get the treatment system running efficiently again.

Report Completion Date: 

Lead Inspector Signature: 10/27/09

Washington Beef Discharge LLC - Photo Log
All photos taken by Robert Grandinetti, EPA on 9/2/2009

ATTACHMENT A

**Photograph Documentation
Washington Beef, LLC
(September 2, 2009 Inspection)**

Washington Beef, Inc. Inspection - Photo Log
All photos taken by Robert Grandinetti, EPA on 9/2/2009



Photo 1 – Photo shows the Wanity Slough upstream of the facility. Notice the Slough appears to be much clearer than the downstream photo in Photo 2. This is consistent with my observations at the time of the inspection.



Photo 2 – Photo of the Spencer Lateral as it enters the Wanity Slough. Note the clarity of the water. Spencer Lateral enters Wanity Slough downstream of Outfall 002 discharges

Washington Beef, Inc. Inspection - Photo Log
All photos taken by Robert Grandinetti, EPA on 9/2/2009



Photo 3 – Photo shows Wanity Slough (taken just downstream of Photo 2). Note that the Slough appears to be very turbid. This point is downstream of Outfall 002 discharges.